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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/098,507	03/18/2002	Hitoshi Hayakawa	Q68700	7121

7590 10/16/2003

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EXAMINER	
HSIEH, SHIH-WEN	
ART UNIT	PAPER NUMBER
2861	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/098,507	Applicant(s) HAYAKAWA ET AL.	
	Examiner Shih-wen Hsieh	Art Unit 2861	MAK

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24 and 33-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24 and 33-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. *09/239,319* .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/239,319 Jan. 29, 1999.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 24, 33, 34, 35 and 36 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 8, 9, 10, 11 and 12 of prior U.S. Patent No. 6,481,824 B1 ('824) respectively. This is a double patenting rejection.

Below is table of comparison between these 5 claims to show their identical:

10/098,507	**6,481,824 B1**
24. An ink jet recording apparatus comprising: a ink jet recording head for discharging ink droplets through nozzle openings of said ink jet recording head upon receiving ink supply from an ink cartridge; capping means for sealing said recording head to absorb ink through the nozzle openings; a pump unit for applying negative pressure to said capping means; a valve unit arranged between said ink cartridge and said nozzle openings of the recording head for opening and closing an ink supply path between the ink cartridge and the nozzle openings; and valve opening/closing, control means for controlling opening and closing of said valve unit, wherein said valve opening/closing control means operates said valve unit to prevent ink from flowing from said ink cartridge to all of said nozzle openings at a first time, wherein said capping means seals said recording head and said pump unit applies said negative pressure at a second time after said first time, wherein said valve opening/closing control means operates said valve unit to allow ink to flow from said ink cartridge to said nozzle openings at a third time after said second time and while said capping means seals said recording heads, wherein said valve opening/closing control means operates said valve unit to prevent ink from flowing from said ink cartridge to all of said nozzle openings at a fourth time after said third time, and wherein said pump unit applies negative pressure to the capping means while said valve opening/closing control means opens an air valve supplying external air to said capping means at a fifth time after said fourth rime and while ink is prevented from flowing to all of said nozzle openings.	8. An ink jet recording apparatus comprising: a ink jet recording head for discharging ink droplets through nozzle openings of said ink jet recording head upon receiving ink supply from an ink cartridge; capping means for sealing said recording head to absorb ink through the nozzle openings; a pump unit for applying negative pressure to said capping means; a valve unit arranged between said ink cartridge and said nozzle openings of the recording head for opening and closing an ink supply path between the ink cartridge and the nozzle openings; and valve opening/closing, control means for controlling opening and closing of said valve unit, wherein said valve opening/closing control means operates said valve unit to prevent ink from flowing from said ink cartridge to all of said nozzle openings at a first time, wherein said capping means seals said recording head and said pump unit applies said negative pressure at a second time after said first time, wherein said valve opening/closing control means operates said valve unit to allow ink to flow from said ink cartridge to said nozzle openings at a third time after said second time and while said capping means seals said recording heads, wherein said valve opening/closing control means operates said valve unit to prevent ink from flowing from said ink cartridge to all of said nozzle openings at a fourth time after said third time, and wherein said pump unit applies negative pressure to the capping means while said valve opening/closing control means opens an air valve supplying external air to said capping means at a fifth time after said fourth rime and while ink is prevented from flowing to all of said nozzle openings.

33. A recording head cleaning method in an ink jet recording apparatus **including** an ink jet recording head for discharging ink droplets upon receiving ink supply from an ink cartridge, capping means for sealing said recording head to absorb ink through nozzle openings in said recording head, and a valve unit arranged between said ink cartridge and said nozzle openings of the recording head for opening and closing the ink supply path between the ink cartridge and the nozzle openings, the recording head cleaning method comprising: (a) sealing the nozzle openings of the recording head with said capping means in a state closing said valve unit and applying negative pressure into the capping means;(b) while applying said negative pressure into the capping means in said operation (a), opening said valve unit to absorb ink from selected nozzle openings of the nozzle openings of the recording head,(c) after said operation (b), sealing the nozzle openings of the recording head with said capping means in said state closing said valve unit and applying negative pressure into the capping means, and(d) while applying said negative pressure into the capping means in said operation (c), opening an air valve to supply external air to said capping means.	9. A recording head cleaning method in an ink jet recording apparatus **having** an ink jet recording head for discharging ink droplets upon receiving ink supply from an ink cartridge, capping means for sealing said recording head to absorb ink through nozzle openings in said recording head, and a valve unit arranged between said ink cartridge and said nozzle openings of the recording head for opening and closing the ink supply path between the ink cartridge and the nozzle openings, the recording head cleaning method comprising: (a) sealing the nozzle openings of the recording head with said capping means in a state closing said valve unit and applying negative pressure into the capping means; (b) while applying said negative pressure into the capping means in said operation (a), opening said valve unit to absorb ink from selected nozzle openings of the nozzle openings of the recording head, (c) after said operation (b), sealing the nozzle openings of the recording head with said capping means in said state closing said valve unit and applying negative pressure into the capping means, and (d) while applying said negative pressure into the capping means in said operation (c), opening an air valve to supply external air to said capping means.
34. A recording head cleaning method as claimed in claim 33, wherein said operation (d) prevents air bubbles formed with discharged ink within the capping means from being pulled into the nozzle openings of the recording head.	10. A recording head cleaning method as claimed in claim 33, wherein said operation (d) prevents air bubbles formed with discharged ink within the capping means from being pulled into the nozzle openings of the recording head.
35. A recording head cleaning method in	11. A recording head cleaning method in

an ink jet recording apparatus **including** an ink jet recording head including nozzle openings for discharging different color ink droplets through said nozzle openings upon receiving ink from ink cartridges, capping means for sealing each nozzle opening of said recording head to absorb ink through the nozzle openings, and a plurality of valve units arranged between said ink cartridges and each nozzle opening of the recording head for opening and closing ink supply paths between the ink cartridges and the nozzle openings, the recording head cleaning method comprising: (a) sealing the nozzle openings of the recording head with said capping means in a state closing said valve units and applying negative pressure into the capping means; (b) while applying said negative pressure into the capping means in said operation (a), opening all or a part of said valve units to absorb ink through selected nozzle openings of the nozzle openings of the recording head, (c) after said operation (b), sealing the nozzle openings of the recording head with said capping means in said state closing said valve units and applying negative pressure into the capping means, and (d) while applying said negative pressure into the capping means in said operation (c), opening an air valve to supply external air to said capping means.	an ink jet recording apparatus **having** an ink jet recording head including nozzle openings for discharging different color ink droplets through said nozzle openings upon receiving ink from ink cartridges, capping means for sealing each nozzle opening of said recording head to absorb ink through the nozzle openings, and a plurality of valve units arranged between said ink cartridges and each nozzle opening of the recording head for opening and closing ink supply paths between the ink cartridges and the nozzle openings, the recording head cleaning method comprising: (a) sealing the nozzle openings of the recording head with said capping means in a state closing said valve units and applying negative pressure into the capping means; (b) while applying said negative pressure into the capping means in said operation (a), opening all or a part of said valve units to absorb ink through selected nozzle openings of the nozzle openings of the recording head, (c) after said operation (b), sealing the nozzle openings of the recording head with said capping means in said state closing said valve units and applying negative pressure into the capping means, and (d) while applying said negative pressure into the capping means in said operation (c), opening an air valve to supply external air to said capping means.
36. A recording head cleaning method as claimed in claim 35, wherein said operation (d) prevents air bubbles formed with discharged ink within the capping means from being pulled into the nozzle openings of the recording head.	12. A recording head cleaning method as claimed in claim 35, wherein said operation (d) prevents air bubbles formed with discharged ink within the capping means from being pulled into the nozzle openings of the recording head.

Based on the table of comparison above, it can be seen that claims between the instant application and patent ('824) are identical, except the bold-face words in claims 33, 35 and 9, 11, i.e., instant application uses "including", while patent ('824) used 'having", which will not obviate the statutory double patenting rejection.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 703-305-4961. The examiner can normally be reached on 7:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, B. Fuller can be reached on 703-308-0079. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Shih-wen Hsieh
Primary Examiner
Art Unit 2861

SWH
Aug. 20, 2003